

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND**  
**INTERFERENCES**

**Appellants:** Haupt *et al.*

**Title:** Changer Apparatus for  
Information Discs

**Serial No.** 09/090,035

**Filed:** 06/10/1998

**Confirmation No.** 3465

**Group Art Unit:** 2153

**Examiner:** Aaron N. Strange

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Mail Stop Appeal Brief-Patent  
Honorable Commissioner of Patents and Trademarks  
Alexandria VA. 22313-1450

Sir:

**AMENDED APPEAL BRIEF UNDER 37 C.F.R. § 41.37(d)**

This Amended Appeal Brief is being submitted under the provisions of 37 C.F.R. §41.37(d) in response to the Notification of Non-Compliant Appeal Brief mailed January 24, 2008. This brief is filed pursuant to the Office Action mailed December 19, 2002 and is an appeal from the rejection by the examiner dated April 8, 2002. The present Amended Appeal Brief addresses the rejections of claims contained in the Office Action mailed December 19, 2002.

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**Real party in interest**

The real party of interest is the Assignee who is U. S. Philips Corporation, a corporation existing under the laws of the State of Delaware (hereinafter Appellant).

**Related appeals and interferences**

There are no related appeals or interferences to the present application that are known to appellants, the appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**Status of the Claims**

Claims 1 and 3-18 and 20-21 remain pending. Claims 1, 3-12, 20, and 21 are rejected. Claims 13-18 are objected to. This brief is in support of an appeal from the rejection of claims 1, 3-12, 20 and 21.

A copy of claims 1 and 3-18 and 20-21 is contained in Appendix III following this brief.

**Status of the Amendments After Final**

There are no after final amendments that have not been entered.

**Summary of the Claimed Subject Matter**

The present invention discloses a disc changer for information discs. The disc changer has a stacking unit for stacking at least two information discs in at least two stacking positions, a read/write unit for reading information stored on the information discs and/or writing information on the information discs in a play position, and an eject position in which an information disc can be removed from the apparatus. See specification, page 1, lines 19-27; and page 2, lines 12 – 13.

The present invention teaches a disc changer that can be constructed with a smaller overall depth because the transport of the information discs, from the eject position into a loading position of the stacking unit, is along a curve-shaped loading path (see specification, page 1, lines 22-27). The curve-shaped loading path is path that extends non-orthogonally with respect to the front side of the changer apparatus and, consequently, that between the eject

position and the loading position the information discs perform a lateral relative movement parallel to the front side of the changer apparatus. Thus, a curve-shaped loading path is defined as including a linear loading path that extends obliquely with respect to the front side of the changer apparatus from the eject position to the loading position.

Regarding transport of the discs, each individual disc is initially brought to the eject position via external means, for example, by hand by a user. This particular disc is then laterally moved into the loading position of the stacking unit along the curve-shaped loading path via transport means. The loading position 16 is within the central zone 15 of stacking unit 4 and is the position into which the individual disc is moved to be placed into the stacking unit 4. The loading position 16 is located between the upper stacking zone 13 and the lower stacking zone 14, and spaced from these zones, respectively, by upper spacing zone 17 and lower spacing zone 18. See specification, page 7, lines 23-28.

The play position is located between the eject position and the loading position. This arrangement allows a disc to be transferred directly from the eject position into the play position without first traveling through the stacking unit. As a result, the changer apparatus can also be used as a single-information-disc playing apparatus, *i.e.*, the stacking unit may be ignored or even eliminated from alternative embodiments of the disc changer.

The play position is offset from an imaginary direct connecting line between the loading position and the eject position, enabling compact construction of the disc changer. This arrangement is noteworthy because usually the play position should be arranged such that the center of the stacking unit is situated outside the perimeter of the disc when the disc is in the play position. For instance, for a disc changer having an essentially square base, a play position, which is offset from a direct connecting line between the eject position and the loading position, enables better space utilization of the available mounting space.

The disc changer also has the play position located on the loading path, thus permitting the same transport means to be used for transport of the disc between the eject position and the loading position, as well as for transport between the eject position and the play position, and transport between the play position and the loading position. Additional transport mechanisms are not needed for disc transfer from the loading path to the play position.

Appealed claim 1 defines subject matter for a changer apparatus for information discs 1 as shown in Figure 1 and described throughout the specification. The changer apparatus includes a stacking unit 4 as illustrated in Figure 2 and described in the specification on page 7, line 21 through page 8, line 27. The stacking unit 4 is used for stacking at least two information discs in respective stacking positions within holder compartments 8, 9, 10, 11 and 12 as described in the specification on page 7, line 21 through page 8, line 27. The changer apparatus further includes a read/write unit 30 for reading information stored on the information discs and/or writing information on the information discs in a play position as described in the Abstract on page 17 of the specification as originally submitted as well as page 9, line 27 through page 10, line 22 of the specification. Appealed claim 1 defines an eject position at which an information disc can be removed from the apparatus as illustrated in Figure 1 and described in the specification on page 6, lines 21-24.

The changer apparatus defined by appealed claim 1 defines transport means (first guide 20, second guide 21, third guide 22 and fourth guide 23) for transporting the information discs from the eject position into a loading position along a curve-shaped loading path as shown in Figures 1, 9 and 10 and described in the specification on page 8, line 29 through page 9, line 14.

The function of the transport means is defined as transporting the information discs from the eject position to the loading position is along the curved shape loading path. Appellants' define the "curve-shaped loading path" in the specification on page 1, lines 22-27 as follows:

"A curve-shaped loading path is to be understood to mean that the loading path extends non-orthogonally with respect to the front side of the changer apparatus and, consequently, that between the eject position and the loading position the information discs perform a lateral relative movement parallel to the front side of the changer apparatus. Thus, a curve-shaped loading path also includes a **linear** loading path which extends obliquely with respect to the front side of the changer apparatus".

The loading position 16 of appealed claim 1 is defined on page 7, lines 26-27 as being within the central zone 15 as illustrated in Figure 2. Figure 2 is a front view of Figure 1

and both illustrate that same eject position for information disc 1. The description to Figure 2 on page 8, lines 2-4 of the specification clearly states that the holder compartment 8 in Figure 2 is in the loading zone 16. Holder compartment 8 in Figure 2 is clearly stated to be in its loading position 16 (see specification page 8, lines 29-30). The loading position 16 of appealed claim 1 is further defined as being a position for loading discs from the loading path of the transport means (first guide 20, second guide 21, third guide 22 and fourth guide 23) into the stacking positions (holder compartments 8, 9, 10, 11 and 12) of the stacking unit 4 as described in the specification on page 8, lines 29-30. The loading position 16 is clearly defined as being a position to which any of holder compartments 8, 9, 10, 11 and 12 can be moved to (see specification page 9, lines 21-24). The loading position 16 as defined by appealed claim 1 is described in the specification as a place where one of the holder compartments 8, 9, 10, 11 or 12 receives the information disc 1 and then the holder compartment with the information disc 1 is moved out of the loading position 16 (see specification page 12, line 30 through page 13, line 2).

Appealed claim 1 further defines that the play position is along the loading path between the eject position and the loading position. This subject matter is described in the specification on page 2, lines 10-17 and page 2, lines 32-33.

Appealed claim 5 further defines the transport means of appealed claim 1 as including a first transport mechanism (first guide 20, second guide 21, third guide 22 and fourth guide 23) for transporting the information discs between the eject position, the play position and the loading position as described in the specification on page 8, line 29 through page 9, line 32, and a second transport mechanism (threaded spindles 5, 6 and 7) for transport of the information discs from the loading position (a holder compartment, see specification page 8, lines 29-31) into the stacking positions of the stacking unit 4 as described in the specification on 7, lines 16-17. Appealed claim 5 further defines that the first transport mechanism moves the information discs in the loading plane (see specification page 9, lines 15-17) and the second transport mechanism moves the information discs in a stacking direction oriented vertically with respect to the loading plane (see specification page 7, lines 16-17).

Appealed claim 13 defines the apparatus of appealed claim 1, wherein the stacking unit includes at least two holder compartments for holding one information disc each (compartments 8, 9, 10, 11 and 12 as described in the specification on page 7, lines 2-5).

Appealed claim 13 further defines the holder compartments 8, 9, 10, 11 and 12 are coupled to at least one threaded spindle (spindles 5, 6, 7) and are movable into a vertical direction by rotation of the spindle as described in the specification page 7, lines 6-20.

Appealed claim 13 further defines that there is provided an upper stacking zone 13 and a lower stacking zone 14 in the stacking unit 4 for stacking the holder compartments as described in the specification on page 7, lines 21-34. The loading position 16 is in a central zone 15 between the upper stacking zone 13 and the lower stacking zone 14 as described in the specification on page 7, lines 23-28. Appealed claim 13 further defines that one of the holder compartments 8, 9, 10, 11 and 12 is each time movable into the loading position 16 by rotation of the spindles (see specification page 8, lines 2-23), and the transport means (second transport wheel 26 of third guide 22, see specification page 9, lines 7-8) move the information disc from the holder compartment, which is in the loading position 16, into the play position and into the eject position as described in the specification on page 13, lines 2-6.

Appealed claim 21 a defines subject matter for a changer apparatus for information discs, including: a stacking unit 4 (illustrated in Figure 2 and described on in the specification on page 7, line 21 through page 8, line 27) for stacking at least two information discs 1 in different respective stacking positions (holder compartments 8, 9, 10, 11 and 12 as described in the specification on page 7, line 21 through page 8, line 27); and a read/write unit 30 for reading information stored on the information discs and/or writing information on the information discs in a play position as described in the Abstract on page 17 of the specification as originally submitted as well as page 9, line 27 through page 10, line 22 of the specification.

Appealed claim 21 further defines an eject position at which an information disc can be inserted and removed from the apparatus as illustrated in Figure 1 and described in the specification on page 6, lines 21-24.

Appealed claim 21 further defines transport means (first guide 20, second guide 21, third guide 22 and fourth guide 23) for transporting the information discs from the eject position into a loading position along a curve-shaped loading path 28 as shown in Figures 1, 9 and 10 and described in the specification on page 8, line 29 through page 9, line 14.

Appellants' define the "curve-shaped loading path" in the specification on page 1, lines 22-27 as follows:

"A curve-shaped loading path is to be understood to mean that the loading path extends non-orthogonally with respect to the front side of the changer apparatus and, consequently, that between the eject position and the loading position the information discs perform a lateral relative movement parallel to the front side of the changer apparatus. Thus, a curve-shaped loading path also includes a **linear** loading path which extends obliquely with respect to the front side of the changer apparatus".

The loading position is described by appealed claim 21 as being a position for loading discs from the loading path of the transport means (first guide 20, second guide 21, third guide 22 and fourth guide 23) into the stacking positions (holder compartments 8, 9, 10, 11 and 12) of the stacking unit 4.

The loading position 16 of appealed claim 21 is defined on page 7, lines 26-27 as being within the central zone 15 as illustrated in Figure 2. Figure 2 is a front view of Figure 1 and both illustrate that same eject position for information disc 1. The description to Figure 2 on page 8, lines 2-4 of the specification clearly states that the holder compartment 8 in Figure 2 is in the loading zone 16. Holder compartment 8 in Figure 2 is clearly stated to be in its loading position 16 (see specification page 8, lines 29-30). The loading position 16 of appealed claim 21 is further defined as being a position for loading discs from the loading path of the transport means (first guide 20, second guide 21, third guide 22 and fourth guide 23) into the stacking positions (holder compartments 8, 9, 10, 11 and 12) of the stacking unit 4 as described in the specification on page 8, lines 29-30. The loading position 16 is clearly defined as being a position to which any of holder compartments 8, 9, 10, 11 and 12 can be moved to (see specification page 9, lines 21-24). The loading position 16 as defined by appealed claim 21 is described in the specification as a place where one of the holder compartments 8, 9, 10, 11 or 12 receives the information disc 1 and then the holder compartment with the information disc 1 is moved out of the loading position 16 (see specification page 12, line 30 through page 13, line 2).

Appealed claim 21 further defines that the discs 1 can be immediately transported from the eject position to the play position without going through the loading position, as described in the specification on page 2, lines 10-17 and page 2, line 32 through page 3, line 4.

### **Grounds of Rejection to be Reviewed on Appeal**

Whether claims 1, 3-12, 20, and 21 are unpatentable under the provisions of 35 U.S.C. §103(a) as being obvious over United States patent No. 5,864,532 issued in the names of Nakamichi et al. (hereinafter *Nakamichi et al.*) in view of European Patent Application No. EP 0 391424 in the name of Umesaki (hereinafter *Umesaki*).

This appeal is pursuant to the Office Action mailed December 19, 2002. The Advisory Action dated July 16, 2002 indicated that the rejection of claims 1, 3-18 and 20 contained in the April 8, 2002 Office Action was being maintained. The appellants responded to the rejection by the examiner dated April 8, 2002 by filing an appeal. This case was reopened by the examiner with a Non-final Office Action dated December 19, 2002. The present appeal addresses the rejections of claims contained in the Office Action mailed December 19, 2002.

### **Argument**

#### **I. The rejection of appealed claims 1, 3-12, 20, and 21 under the provisions of 35 U.S.C. §103 (a) as being obvious over *Nakamichi et al.* (U.S. Patent No. 5,864,532) in view of *Umesaki* (EP 0 391424)**

##### **A. The rejection under 35 U.S.C. S 103(a)**

Appealed claims 1, 3-12, 20, and 21 are rejected under 35 U.S.C. §103 (a) as being obvious over *Nakamichi et al.* (U.S. Patent No. 5,864,532) in view of *Umesaki* (EP 0 391424). The position taken by the examiner is that it would have been obvious to a person of ordinary skill within the art to apply the loading path of *Umesaki* to the disc holder apparatus of *Nakamichi et al.* to arrive at the present invention as defined by appealed claims.

### **PRICIPLES OF LAW**

To “establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to

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combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).” See the MPEP at §2143.

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

The Supreme Court stated that it “must also keep in mind that a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR Int’l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007). The Court noted, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), that to facilitate review, this analysis should be made explicit. Rejections based “on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”. *KSR Int’l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007).

The Supreme Court stated that “the principles laid down in *Graham* reaffirmed the functional approach of *Hotchkiss*, 11 How. 248.” *KSR Int’l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1739, 82 USPQ2d 1388, 1395. “When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.” *KSR Int’l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1740, 82 USPQ2d 1388, 1396. The

operative question in this "functional approach" is thus "whether the improvement is more than the predictable use of prior art elements according to their established functions." *Id.*

The MPEP at §2143.01 states that if “the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).”

The MPEP at §2111.01 states that the words of a claim must be given their plain meaning unless they are defined in the specification. The MPEP at §2111.01 further states that plain meaning refers to the ordinary and customary meaning that term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application." *Sunrace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1302, 67 USPQ2d 1438, 1441 (Fed. Cir. 2003); *Brookhill-Wilk I, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 67 USPQ2d 1132, 1136 (Fed. Cir. 2003). The MPEP at §2111.01 further states that an “applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s). See *In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994).”

## **B. The references**

### ***Nakamichi et al.* (U.S. Patent No. 5,864,532)**

The teachings of *Nakamichi et al.* relate to an information disc handling apparatus, capable of ejecting, storing and reading an information disc. *Nakamichi et al.* teach a changer apparatus for information discs in their respective stacking locations within a stacking unit at col. 17, lines 25-25.

The disc transport means in *Nakamichi et al.* utilizes an endless timing belt 1002 (Figure 13) in cooperation with a disk guide 1003 to transport a disc in a single horizontal plane. Note that *Nakamichi et al.* do not teach transporting the disc along a curve shaped loading path. *Nakamichi et al.* disclose an apparatus wherein the play position is not offset from the direct connecting line between the loading position and the eject position, because, the center point of

each of these three positions is located along the same direct line, as shown in Figures 14 and 24.

*Nakamichi et al.* teach a disc read/write unit that supports a disk between two opposing longitudinal guides, one with a moving belt running along it. The belt frictionally engages a disk edge roll the disk along the opposite guide. A stacking unit (stocker) includes supports spaced apart at intervals that allow the discs to be inserted between adjacent supports. Projecting elements with sheeting folded about them are lined up with the spaces between the supports and inserted, forcing the lining material into the spaces. The lining material is then retained in the spaces by passing a single retaining shaft through a series of holes in the sheet at the rear end of the stocker. See Abstract.

*Nakamichi et al.* teach that the disc guide 11, which includes the guide groove, is not "movable in the loading plane" as required by appealed claim 6. Rather, the disc guide 11 of *Nakamichi et al.* remains stationary while the disc travels along its length. Additionally, the transport wheels 7, 15, of *Nakamichi et al.*, which the examiner alleges drive the disc along the loading path, actually do not operate on the disc. Rather, the transport wheels 7, 15 propel the timing belt 14. The timing belt 14 in turn propels the disc.

*Nakamichi et al.* disclose an optical mechanism 1006 which resides in vertical transport mechanism 1007. Vertical transport mechanism 1007 is in turn mounted in sliding plate 75 of damper lock mechanism 1008. Damper lock mechanism 1008 is then mounted on chassis 90. It should be noted that the optical mechanism 1006 is not mounted on the chassis 90, but is instead isolated from the chassis 90 via several intermediate structures, such as, *inter alia*, the sliding plate 75 and the damper lock mechanism 1008. See col. 13, line 61 to col. 14, line 15; and Figures 9 and 10.

### **Umesaki (EP 0 391424)**

*Umesaki* relates to information disc handling apparatus that are capable of ejecting, storing and reading information discs of different diameters (see Abstract). The performance position is constructed obliquely and rearwards of the storing position (see col. 2, lines 10-13). *Umesaki* teaches to use a pivoting motion around a shaft to move a disc to or from the insertion opening at the front of the apparatus. *Umesaki* further teaches the placement and

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removal of discs with respect to a storage magazine using a vertical movement in the path between the play position and the loading position. See col. 2, lines 20-23. *Umesaki* does not, disclose, a loading position for the storage magazine that is laterally located from the eject position along a "curve-shaped loading path".

The loading position as taught by *Umesaki* is vertical with respect to the playing position. Figure 2 and the discussion related thereto on col. 4, lines 43-53 describe the path the disc takes between the loading position into the storage magazine 5 and the play position on traverse mechanism (player) 1. Figure 3 of *Umesaki* illustrates the movement of a disc from the eject position to the play position. The roller moves the disc in a pivoting motion from the eject position to the traverse mechanism (player) 1 into the play position. Figure 13 of *Umesaki* clearly illustrates the placement of a disc 6 in the loading position in relation to the storage magazine 5 and the play position on the traverse mechanism (player) 1. The path between the loading position and the play position is clearly a vertical path. *Umesaki*, does not teach a loading position that is on a "curve-shaped loading path".

A disc in *Umesaki* may follow one of three distinct paths. A first path is through the direct insertion opening 10 to the centering ring 1 a of the traverse mechanism 1 (*i.e.*, the play position), as shown in Figures 3 and 4. A disc following this path travels directly from the eject position to the play position. The loading or store position is thus completely bypassed. See col. 5, line 20 to col. 6, line 2.

A second path is into the magazine 5, from the eject position at the front exterior of the apparatus, via magazine storing opening 11, and then to the centering ring 1a of the traverse mechanism 1 (*i.e.*, the play position), as shown in Figures 1 and 2. See col. 5, line 20 to col. 6, line 2. A disc following this path travels from the eject position to the play position, via the loading or store position of magazine 5. However, the portion of the movement from the loading position to the play position is not "a lateral relative movement". The term "lateral" means that the disc must move horizontally in approximately the same plane. *Umesaki* does not. Rather, the disc in *Umesaki* moves both horizontally as well as vertically to move from the loading position to the play position. See col. 4, lines 39-56. Therefore, this second path is not "linear". Rather, the second path is discontinuous and nonlinear, since it requires the disc to

move in a first direction in a first plane (*i.e.*, horizontally), and then abruptly change direction and proceed in a second direction in a second plane (*i.e.*, vertically) which is orthogonal to the first direction. See, for example, Figures 1 and 2.

The third path is a combination of the first two paths. This third path extends from the direct insertion opening 10 to the centering ring 1a of the traverse mechanism (*i.e.*, the play position), and then to the loading or store position of magazine 5. The reverse of this path sequence may also be present. In this third path, the disc must again move both horizontally as well as vertically, and again requires that the disc move in three dimensions. Furthermore, the third path is not linear. Rather, the third path is discontinuous and nonlinear, since it requires the disc to move in a first direction, and then to reverse direction and proceed in a second direction which is opposite to the first direction, in order to move from the direct insertion opening 10, via the traverse mechanism 1, to the magazine 5. See, for example, Figures 1 and 2.

### **C. The differences between the invention and the references**

#### **Appealed claim 1**

The art cited in the Office Action does not disclose each and every feature of independent claim 1. Specifically, neither *Nakamichi et al.* nor *Umesaki*, taken alone or in combination, teach or suggest a changer apparatus for information discs comprising: “a stacking unit”; “a read/write unit”; “an eject position”; and “transport means for transporting the information discs from the eject position into a loading position along a curve-shaped loading path, the loading position being a position for loading discs from the loading path of the transport means into the stacking positions of the stacking unit; and in which the play position is along the loading path between the eject position and the loading position.”

In Appellants' specification, the "curve-shaped loading path" is defined on page 1, lines 22-27 in this way:

"A curve-shaped loading path is to be understood to mean that the loading path extends non-orthogonally with respect to the front side of the changer apparatus and, consequently, that between the eject position and the loading position the information discs perform a lateral relative movement parallel to the front side of the changer apparatus. Thus, a curve-shaped

loading path also includes a linear loading path which extends obliquely with respect to the front side of the changer apparatus".

Appealed claim 1 also defines the loading position 16 on page 7, lines 26-27 as being within the central zone 15 illustrated in Figure 2. The present invention, thus, defines the loading position 16 as being in a specific location. This defined location for the loading position 16 within the central zone 15 is clearly shown with Figure 2 to be laterally situated with respect to the play position and the eject position. This relative positioning of a loading position 16 laterally situated with respect to the eject position and the play position is not disclosed or suggested by the cited references. The rejection attempts to read the loading position of *Umesaki* as being on the curved shaped loading path as defined by the present invention. However, *Umesaki* requires a vertical movement of the disc to place the disc onto the equivalent of the loading position within *Umesaki* for placement into the storage magazine. The description to Figure 2 of the present invention on page 8, lines 2-4 clearly states that the holder compartment 8 in Figure 2 is in the loading zone 16. There is no vertical movement required by appealed claim 1 to reach the loading position. Moreover, the clear and unequivocating definition and use of the term "loading position" within the specification combined with the specific recitations contained in appealed claim 1, require that the loading position be laterally situated with respect to the play position and the eject position. Therefore, the examiner's position that appealed claim 1 is so broadly stated that it reads on the combination of *Nakamichi et al.* with *Umesaki* is unfounded.

The holder compartment 8 in Figure 2 is clearly stated to be in its loading position 16 (see specification page 8, lines 29-30). The loading position 16 of appealed claim 1 is further defined as being a position for loading discs from the loading path of the transport means (first guide 20, second guide 21, third guide 22 and fourth guide 23) into the stacking positions (holder compartments 8, 9, 10, 11 and 12) of the stacking unit 4 as described in the specification on page 8, lines 29-30. The loading position 16 is clearly defined as being a position to which any of holder compartments 8, 9, 10, 11 and 12 can be moved to (see specification page 9, lines 21-24). The loading position 16 as defined by appealed claim 1 is described in the specification as a place where one of the holder compartments 8, 9, 10, 11 or 12 receives the information disc 1 and then the holder compartment with the information disc 1 is moved out of the loading position 16 (see specification page 12, line 30 through page 13, line 2). Here there is a fundamental

difference between *Umesaki* and the subject matter defined by appealed claim 1. *Umesaki* teach a storage magazine having storage compartments that remain stationary and the disc is moved into each storage compartment through a vertical movement. The present invention, as defined by appealed claim 1, defines a storage unit that has multiple compartments that can be placed into the loading position. This is the proper interpretation of the limitations of appealed claim 1. Appealed claim 1 defines that at least two information discs are within the stacking unit. The transport means move each of the discs into the loading position. The loading position is always the same; this point is defined and discussed repeatedly within the specification to the present invention as stated above.

The appellants have the right to be their “own lexicographer”. The definitions for the terminology of the “curve-shaped loading path” and the “loading position” need to be interpreted in view of the definitions that are supplied by the specification to the present invention. The “loading position” is defined by the specification as described above, without exception, to be in a lateral position along the loading path with respect to the play position and the eject position. The curve-shaped loading path is defined such that between the eject position and the loading position the information discs perform a lateral relative movement. The rejection does not apply the clear definitions that are supplied with the specification to the present invention and, therefore, attempts to deny the appellants their right to be their own lexicographer. There is no reasonable reading of appealed claim 1 that can be read so broadly as to encompass the vertical loading mechanism that is taught by *Umesaki*. Accordingly, all the elements defined by appealed claim 1 are not found in the combination made by the rejection. Therefore, the rejection has not established a *prima facie* case of obviousness in relation to appealed claim 1.

It would not have been predictable at the time of filing the present application for invention, to combine *Nakamichi et al.* and *Umesaki* to create the invention as defined by appealed claim 1. The invention as defined by appealed claim 1 requires that the disc(s) be transferred to the loading position in a lateral movement. The combination of *Nakamichi et al.* with *Umesaki* results in disc being placed into the stacking unit using a vertical motion that is completely independent of the pivoting movement *Umesaki*. Appealed claim 1 defines subject matter for disc transfer, an eject position, a stacking unit and placement of discs into the stacking unit. Independently, each of these elements can be found within the prior art. The function of

appealed claim 1 is to place discs into the loading position using a lateral movement that is not a predictable use of these elements. There is nothing in the cited references that would lead a person of ordinary skill within the art to deviate from the vertical transport of *Umesaki* to create a loading position into which a disc can be placed using only a lateral movement of a transport means. A person of ordinary skill in the art would not have predicted the function that is performed by laterally moving a disc into the loading position to that it can be placed into the stacking unit as defined by appealed claim 1 from the teachings of *Nakamichi et al.* and *Umesaki* either alone or in combination.

The appellants assert that the examiner has not established a *prima facie* case of obviousness in relation to appealed claim 1 because all of the elements of appealed claim 1 are not found by a reasonable reading of the elements of appealed claim 1 and the cited references. The examiner admits that *Nakamichi et al.* do not disclose transporting the disc along a curve-shaped loading path (see paper no. 26, page 3). The examiner maintains that “*Umesaki* discloses having a curved shape path for transporting the disc, see figs. 3, 6, and 7.” See paper no. 26, page 3. Appellants respectfully submit that the so-called “curved shape path” of *Umesaki* is not, in fact, a “curve-shaped loading path” as this term is defined in Appellants’ specification. Simply put, the curve-shaped path as defined by the specification and appealed claim 1 requires a loading position that is laterally situated with respect to the eject position and the play position. Furthermore, the curve-shaped path places a disc into the loading position from the eject position using a lateral movement. Therefore, the examiner has not established a *prima facie* case of obviousness in relation to appealed claim 1 because all of the elements of appealed claim 1 are not found by the combination made in the rejection.

Appellants submit that the combination of *Nakamichi et al.* with *Umesaki*, fails to disclose or suggest the disc loading path having each of the two features, emphasized above, for a “curve-shaped loading path” and “loading position” as recited in Appellants’ claim 1.

A disc in *Umesaki* may follow one of several paths. None of these paths results in a disc being moved from an eject position to a loading position that is laterally situated with respect to the eject position. A first path is through the direct insertion opening 10 to the centering ring 1a of the traverse mechanism 1 (*i.e.*, the play position), as shown in Figures 3 and 4. A disc following this path travels directly from the eject position to the play position. See col. 5, line 20 to col. 6, line 2. The loading or store position is only achieved by vertical movement



of the disc into a loading position for one storage compartments within storage magazine 5.

A second path taught by *Umesaki* is into the magazine 5, from the eject position at the front exterior of the apparatus, via magazine storing opening 11, and then to the centering ring 1a of the traverse mechanism 1 (*i.e.*, the play position), as shown in Figures 1 and 2. See col. 5, line 20 to col. 6, line 2. A disc following this path travels from the eject position to the play position, via the loading or store position of magazine 5. However, the portion of the movement from the loading position to the play position is not "a lateral relative movement". The term "lateral" means that the disc must move horizontally in approximately the same plane. Appellants' apparatus accomplishes this lateral movement of the disc. *Umesaki* does not. Rather, the disc in *Umesaki* moves both horizontally as well as vertically to move from the loading position to the play position. See col. 4, lines 39-56. Therefore, this second path is not "linear". Rather, the second path is discontinuous and nonlinear, since it requires the disc to move in a first direction in a first plane (*i.e.*, horizontally), and then abruptly change direction and proceed in a second direction in a second plane (*i.e.*, vertically) which is orthogonal to the first direction. See, for example, Figures 1 and 2.

The third path taught by *Umesaki* is a combination of the first two paths. This third path extends from the direct insertion opening 10 to the centering ring 1a of the traverse mechanism 1 (*i.e.*, the play position), and then to the loading or store position of magazine 5. The reverse of this path sequence may also be present. In this third path, the disc must again move both horizontally as well as vertically, and again requires that the disc move in three dimensions. Furthermore, the third path is not linear. Rather, the third path is discontinuous and nonlinear, since it requires the disc to move in a first direction, and then to reverse direction and proceed in a second direction which is opposite to the first direction, in order to move from the direct insertion opening 10, via the traverse mechanism 1, to the magazine 5. See, for example, Figures 1 and 2.

Another reason why the examiner has not established a *prima facie* case of obviousness in relation to claim 1 is that the Examiner further alleges that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the disc holder of *Nakamichi 'et al.* with a curve-shaped loading path for transporting the disc as allegedly disclosed in *Umesaki*. The examiner relies on the following rationale to support his theory: "It would have been desirable to reduce the length of the disk player by providing the

means for having a curved shape loading path. One of ordinary skill would have been motivated by the teaching of *Umesaki* to have modified the transporting system of *Nakamichi et al.* with the means for providing the curved transportation path as taught by *Umesaki*, thereby having provided means for transporting the dis[c] that would reduce the overall length of a dis[c] drive." (See paper no. 26, page 4). Appellants contend that the examiner's rationale indicates use of unacceptable hindsight construction, since neither *Nakamichi et al.* nor *Umesaki* presents any motivation to rearrange their respective components to differently transport an information disc within each mechanism. *Nakamichi et al.* is directed to solving known problems with existing belt-driven disc mechanisms, and discloses transporting a disc with one or more drive belts, and further suggests that fixed guides may replace at least one belt. *Umesaki* discloses transporting a disc with a rotating roller arm. While the cited references do contemplate alternative embodiments, Appellants submit that neither cited reference suggests replacing its preferred transport means with transport means suggested by the other reference, since such alternative embodiments would require completely rearranging the components of the apparatus.

The Examiner has not established a *prima facie* case of obviousness in relation to claim 1 because altering the disc transport means disclosed in *Nakamichi et al.* with the disc transport means of *Umesaki* would destroy the teaching of either reference. The disc transport means in *Nakamichi et al.* utilizes an endless timing belt 1002 (Figure 13) in cooperation with a disk guide 1003 to transport a disc in a single horizontal plane. *Umesaki* uses a roller arm 4 (Figure 1) in cooperation with passive 4a and driving 4b rollers (Figure 2) to transport a disc, in both horizontal and vertical directions. Appellants submit that any attempted modification of *Nakamichi et al.* with the teachings of *Umesaki*, as suggested by the examiner, would necessitate such extensive modifications of either cited reference as to make such modification clearly nonobvious.

In summary, *Nakamichi et al.* and *Umesaki*, taken alone or in combination, do not teach or suggest, *inter alia*, "transport means for transporting the information discs from the eject position into a loading position along a curve-shaped loading path, the loading position being a position for loading discs from the loading path of the transport means into the stacking positions of the stacking unit; and in which the play position is along the loading path between the eject position and the loading position" as recited in claim 1.

In view of the foregoing, the examiner has not established a *prima facie* case of obviousness in relation to claim 1, appellants maintain that claim 1 is unobvious over *Nakamichi et al.* in view of *Umesaki*, and meets the criteria for allowance. Additionally, appellants maintain that claims 3-12, which depend from claim 1, meet the criteria for allowance.

### **Appealed claim 3**

The appellants assert that appealed claim 3 defines subject matter that is independently patentable. Appealed claim 3 defines the patentable feature of: “wherein the play position is offset from a direct connecting line between the loading position and the eject position.” Appellants traverse the examiner's position that the aforementioned feature is taught in *Nakamichi et al.* Appellants contend that *Nakamichi et al.* disclose an apparatus wherein the play position is not offset from the direct connecting line between the loading position and the eject position, because, the center point of each of these three positions is located along the same direct line, as shown in Figures 14 and 24. As disclosed in *Umesaki*, while the play position is offset from a direct connecting (*i.e.*, vertical) line between the loading position and the eject position, this offset is the result of the loading position and the eject position being located in two separate planes, rather than in the same plane as in Appellants' invention. Alternatively, Appellants maintain that claim 3 is allowable because claim 3 depends from claim 1 which, as argued *supra*, is allowable.

### **Appealed claim 4**

The appellants assert that appealed claim 4 defines independently patentable subject matter. Appealed claim 4 defines the patentable feature: “wherein the play position is disposed on the loading path.” Appellants disagree with the examiner's stated position that the aforementioned feature is disclosed in *Nakamichi et al.* *Nakamichi et al.* do not teach or suggest this arrangement, since *Nakamichi et al.* do not disclose a play position disposed along a loading path having the claimed curve-shaped feature. Appellants also maintain that claim 4 is allowable because claim 4 depends from claim 1 which, as argued *supra*, is allowable.

### **Appealed claim 5**

The appellants assert that appealed claim 5 defines independently patentable subject matter. Appealed claim 5 includes the patentable feature: “a first transport mechanism for transporting the information discs between the eject position, the play position and the loading position, and a second transport mechanism for transport of the information discs from the loading position into the stacking positions of the stacking unit.” Appellants disagree with the examiner's stated position that the aforementioned feature is disclosed in *Nakamichi et al.* *Nakamichi et al.* do not teach or suggest an obvious variant of an information disc transport mechanism which transports information discs in a curve-shaped loading path. Appellants maintain that claim 5 is also allowable because claim 5 depends from claim 1 which, as argued *supra*, is allowable.

### **Appealed claim 6**

The appellants assert that appealed claim 6 includes independently patentable subject matter. Appealed claim 6 defines the patentable feature: “wherein the first transport mechanism includes at least a first and a second guide for the disc edge of the information disc, the first guide includes a groove for supporting the disc moving along the loading path and the first guide is movable in the loading plane, the second guide includes at least one rotationally drivable first transport wheel for driving the disc to move along the loading path.” Appellants disagree with the examiner's stated position that the aforementioned feature is disclosed in *Nakamichi et al.* *Nakamichi et al.* do not teach or suggest an obvious variant of such an information disc guide mechanism which has a first guide that is movable in the loading plane. *Nakamichi et al.* teach that the disc guide 11, which includes the guide groove, is not “movable in the loading plane” as required by appealed claim 6. Rather, the disc guide 11 of *Nakamichi et al.* remains stationary while the disc travels along its length. Additionally, the transport wheels 7, 15, of *Nakamichi et al.*, which the examiner alleges drive the disc along the loading path, actually do not operate on the disc. Rather, the transport wheels 7, 15 propel the timing belt 14. The timing belt 14 in turn propels the disc. Therefore, appellants submit that it would not be obvious to one skilled in the art to modify *Nakamichi et al.* so that the disc is transported by the rotation of either of the transport wheels 7, 15, since the disc must move away from either transport wheel 7, 15 to travel the straight path found in the cited reference. In contrast, appealed

claim 6 defines a single rotating guide to transport the disc, since the disc may rotate about the rotating guide. This transport of the disc, about a rotating guide is possible because of the novel design of the curve-shaped loading path defined by appealed claim 6. Appellants further maintain that appealed claim 6 is allowable because appealed claim 6 depends from claim 1 which, as argued *supra*, is allowable.

#### **Appealed claim 7**

Appealed claim 7 includes the patentable feature: “the first, the second, the third and the fourth guides are pre-loaded towards the curve-shaped loading path”. Appellants disagree with the Examiner's stated position that the aforementioned feature is taught or suggested by *Nakamichi et al.* in view of *Umesaki*. *Nakamichi et al.* do not disclose or suggest an obvious variant of such an information disc guide mechanism which includes a curve-shaped loading path. *Nakamichi et al.* also does not disclose or suggest guides which are pre-loaded towards the loading path, regardless of whether or not the loading path is curve-shaped. *Umesaki* teaches pivoting roller arms, but the roller arm is not pre-loaded towards the loading path; rather, the roller arm defines the loading path, and is not pre-loaded. Further, Appellants submit that it would not be predictable to attempt to combine the planar, linear loading path of *Nakamichi et al.* with the three-dimensional loading path of *Umesaki*, since these cited references teach away from each other and neither suggests the mechanism defined by appealed claim 7. Appellants further maintain that claim 7 is allowable because claim 7 depends from claim 1 which, as argued *supra*, is allowable.

#### **Appealed claim 8**

Appealed claim 8 includes the patentable feature: “the first and the third guide are mounted on a common pivot.” Appellants disagree with the examiner's stated position that the aforementioned feature is taught or suggested by *Nakamichi et al.* in view of *Umesaki*. *Nakamichi et al.* do not teach or suggest an obvious variant of such an information disc guide mechanism, since the guides 12, 14 therein do not pivot. *Umesaki* teaches two pivoting guides, namely roller arm 4 and detection guide 12b. However, these two guides do not share a common pivot point. Rather each has its own unique pivot point. Roller arm 4 pivots about pivoting shaft 4c (Figure 5). Detection guide 12b pivots about detection guide shaft 12d (Figure 5). Appellants

therefore submit that neither cited reference teaches or suggests the patentable features of claim 8, and thus claim 8 is not obvious in view of the cited

### **Appealed claim 9**

Appealed claim 9 includes the patentable feature: “wherein a read/write unit is movably supported on a chassis plate of the apparatus.” Appellants disagree with the examiner's stated position that the aforementioned feature is disclosed in *Nakamichi et al.* As explained *supra*, *Nakamichi et al.* does not teach or suggest an obvious variant of such an information disc apparatus wherein the read/write unit is supported on a chassis plate. Rather, *Nakamichi et al.* disclose an optical mechanism 1006 which resides in vertical transport mechanism 1007. Vertical transport mechanism 1007 is in turn mounted in sliding plate 75 of damper lock mechanism 1008. Damper lock mechanism 1008 is then mounted on chassis 90. It should be noted that the optical mechanism 1006 is not mounted on the chassis 90, but is instead isolated from the chassis 90 via several intermediate structures, such as, *inter alia*, the sliding plate 75 and the damper lock mechanism 1008. See col. 13, line 61 to col. 14, line 15; and Figures 9 and 10. Appellants submit that it would not be predictable to movably support the optical mechanism 1006 directly on chassis 90. Appellants therefore submit that neither cited reference teaches or suggests the patentable features of appealed claim 9, and thus appealed claim 9 is not obvious in view of the cited references. Appellants further maintain that appealed claim 9 is allowable because appealed claim 9 depends from claim 1 which, as argued *supra*, is allowable.

### **Appealed claim 10**

Appealed claim 10 includes the patentable feature: “wherein the read/write unit includes a base plate and a laser mounting plate, the base plate and the laser mounting plate are coupled by means of dampers”. Appellants disagree with the examiner's stated position that the aforementioned feature is disclosed in *Nakamichi et al.* *Nakamichi et al.* does not teach or suggest an obvious variant of such an information disc apparatus wherein the base plate and the laser mounting plate are coupled by means of dampers. Rather, the optical pickup 2 is mounted directly on chassis 30. Then, this combined structure is mounted on base 40 via fasteners 43, first dampers 44, second dampers 41, and springs 42 as shown in Figure 9. Appellants respectfully submit that this construction, taken alone or in combination with *Umesaki*, does not

disclose or suggest appellants' apparatus as recited in claim 10. Specifically, appellants' apparatus includes laser unit 39 and associated laser mounting plate 35 which are coupled to base plate 31 via first, second and third dampers 32, 33, 34, respectively. See specification, page 10, lines 2-3; and Figures 2 and 3. Appellants submit that the construction of Figures 2 and 3 provides an unexpected amount of vibration dampening due to the increased size of the dampers used, and the position of the dampers adjacent the laser unit rather than adjacent, the chassis. Appellants therefore submit that neither cited reference discloses or suggests the patentable features of claim 10, and thus claim 10 is not obvious in view of the cited references. Appellants further maintain that claim 10 is allowable because claim 10 depends from claim 1 which, as argued *supra*, is allowable.

#### **Appealed claim 11**

Appealed claim 11 includes the patentable feature: "wherein the read/write unit is movable into the play position in the vertical direction." Appellants disagree with the examiner's stated position that the aforementioned feature is disclosed in *Nakamichi et al.* *Nakamichi et al.* do not teach or suggest an obvious variant of such a read/write unit. Appellants further maintain that claim 11 is allowable because claim 11 depends from claim 1 which, as argued *supra*, is allowable.

#### **Appealed claim 12**

Appealed claim 12 includes the patentable feature: "wherein in the play position the first, second, third and fourth guides are pivoted away from the disc edge of the information disc, and the pivoting away of the guides is controlled by the base plate of the read/write unit or a sliding plate." Appellants traverse the examiner's position that the aforementioned feature is disclosed, taught or suggested by *Nakamichi et al.* in view of *Umesaki*. Neither *Nakamichi et al.* nor *Umesaki*, taken alone or in combination, disclose, teach or suggest a mechanism wherein "the pivoting away of the guides is controlled by the base plate of the read/write unit or a sliding plate." Appellants' apparatus includes this feature as illustrated in, for example, Figure 5. In Figure 5 guide pins 31a, 31b, 31c, 41a interact with sliders 44, 45, 46 and guideways 40, 41, respectively, in order to urge the pivoting away of the guides. See, for example, the specification at page 11, line 33 to page 12, line 5, which state the following (referring to Figure 10): "The

pivoting away of the first guide 20, the second guide 21, the third guide 22 and the fourth guide 23 is controlled by the movement of the sliding plate 43, which performs a movement in the y direction between the second intermediate position and the play position. During this movement between the second intermediate position and the play position the sliding plate 43 urges the first guide 20, the second guide 21, the third guide 22 and the fourth guide 23 away from the information disc 1 against the pre-loading forces.”

In contrast, neither *Nakamichi et al.* nor *Umesaki*, taken alone or in combination, teach or suggest such an arrangement. For example, in *Umesaki*, guides 17 remain stationary while a lever 16 is used to move the traverse mechanism 1 vertically, which allows a disc to be inserted. See *Umesaki*, specification, col. 8, lines 23-58; and Figures 10 and 11. Similarly, *Nakamichi et al.* teaches drive-side disc guide 1002 (Figure 3) and fixed disc guide 1003 (Figure 4). Again, neither of these disc guides pivots. Rather, each of these disc guides is slideably mounted on chassis 80, and slides transversely away from the centerline of the disc apparatus when a disc is inserted into the apparatus. See col. 6, lines 50-65. Appellants therefore submit that neither cited reference teaches or suggests the patentable features of claim 12, and thus claim 12 is not obvious in view of the cited references.

Appellants further contend that it would be necessary to destroy the teachings of *Nakamichi et al.* in order to combine the transversely sliding disc mechanism of *Nakamichi et al.* with the stationary guides of *Umesaki*, particularly since *Nakamichi et al.*'s disc mechanism must expand and compress transversely to accept discs of different diameters.

Appellants also note that in *Umesaki*, the movement or pivoting of the guides occurs while the information disc is in the eject or access position. However, in appealed claim 12, the guides are pivoted when the information disc is in the play position, so the guides are prevented from interfering with the reading of the information disc. Again, arranging the guides so they do not interfere with the disc reading position is not taught or suggested by *Nakamichi et al.* or *Umesaki*, alone or in combination.

### **Appealed claim 20**

Appealed claim 20 includes the patentable feature: “the overall depth of the apparatus is less than or equal to approximately 1.5 times the information disc diameter.” Appellants disagree with the examiner's stated position that the aforementioned feature is



disclosed in *Nakamichi et al.* *Nakamichi et al.* and *Umesaki* do not teach or suggest an obvious variant of such a disc changer apparatus. The disc handling apparatus of each cited reference is designed to accommodate discs having different diameters. Since the disc diameter is not constant, the overall depth of the apparatus can not be dependent upon the disc diameter. Appellants therefore submit that neither cited reference teaches or suggests the patentable features of claim 20, and thus claim 20 is not obvious in view of the cited references. Appellants further maintain that claim 20 is allowable because claim 20 depends from claim 1 which, as argued *supra*, is believed to be allowable.

### **Appealed claim 21**

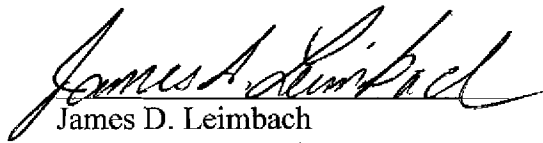
Appealed claim 21 includes the patentable feature of: “the discs can be immediately transported from the eject position to the play position without going through the loading position.” Appellants disagree with the examiner's stated position that the aforementioned feature is disclosed in *Nakamichi et al.* *Nakamichi et al.* do not teach or suggest an obvious variant of an apparatus having this patentable feature. Additionally, since the examiner presented arguments as being applicable to both claim 1 and claim 21, it therefore follows that appellants' arguments presented *supra* for claim 1 also apply to claim 21.

**Conclusion**

In summary, the examiner's rejections of the claims are believed to be in error for the reasons explained above. The rejections of each of claims 1-20 should be reversed.

The Commissioner is authorized to charge fees associated with the filing of this brief to Account No. 50-3745 including any underpayments, excluding the payment of any issue fees, and to credit any overpayments to the same account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "James D. Leimbach", is written over a horizontal line.

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**APPENDIX I. Evidence on Appeal**

“None”

**APPENDIX II. Related Proceedings**

“None”

**APPENDIX III. Claims on Appeal**

1. A changer apparatus for information discs, comprising:  
a stacking unit for stacking at least two information discs in respective stacking positions;  
a read/write unit for reading information stored on the information discs and/or writing information on the information discs in a play position;  
an eject position at which an information disc can be removed from the apparatus; and  
transport means for transporting the information discs from the eject position into a loading position along a curve-shaped loading path, the loading position being a position for loading discs from the loading path of the transport means into the stacking positions of the stacking unit;  
and in which the play position is along the loading path between the eject position and the loading position.
3. The apparatus of Claim 1, wherein the play position is offset from a direct connecting line between the loading position and the eject position.
4. The apparatus of Claim 1, wherein the play position is disposed on the loading path.
5. The transport means of Claim 1, including a first transport mechanism for transporting the information discs between the eject position, the play position and the loading position, and a second transport mechanism for transport of the information discs from the loading position into the stacking positions of the stacking unit, the first transport mechanism moves the information discs in the loading plane and the second transport mechanism moves the information discs in a stacking direction oriented vertically with respect to the loading plane.
6. The apparatus of Claim 5, wherein the first transport mechanism includes at least a first and a second guide for the disc edge of the information disc, the first guide includes a groove for supporting the disc moving along the loading path and the first guide is movable in the loading plane, the second guide includes at least one rotationally drivable first transport wheel for driving the disc to move along the loading path.
7. The apparatus of Claim 6, wherein:

the first guide is a passive supporting guide;

the first transport mechanism further includes: a third guide for the disc edge and having a second transport wheel for driving the disc to move along the loading path; and a passive supporting guide as a fourth guide for the disc edge with a groove for supporting the disc moving along the loading path;

the first, the second, the third and the fourth guides include one or more pivotal arms which are supported at one end and which are pivotable in the loading plane;

the first, the second, the third and the fourth guides are pre-loaded towards the curve-shaped loading path;

the first transport wheel moves the information discs between the eject position and a transfer position and the second transport wheel moves the information discs from the transfer position into the loading position.

8. The apparatus of Claim 7, wherein the first and the third guide are mounted on a common pivot.

9. The apparatus of Claim 1, wherein a read/write unit is movably supported on a chassis plate of the apparatus.

10. The apparatus of Claim 9, wherein the read/write unit includes a base plate and a laser mounting plate, the base plate and the laser mounting plate are coupled by means of dampers, the base plate is slidably mounted on the chassis plate, and the laser mounting plate carries an optical unit for reading information stored on the information disc and a clamping device for clamping the information disc in the play position so that the read unit is isolated from vibrations of the chassis.

11. The apparatus of Claim 9, wherein the read/write unit is movable into the play position in the vertical direction.

12. The apparatus of Claim 9, wherein in the play position the first, second, third and fourth guides are pivoted away from the disc edge of the information disc, and the pivoting away of the guides is controlled by the base plate of the read/write unit or a sliding plate.
13. The apparatus of Claim 1, wherein  
the stacking unit comprises at least two holder compartments for holding one information disc each;  
the holder compartments are coupled to at least one threaded spindle and are movable into a vertical direction by rotation of the spindles;  
there is provided an upper stacking zone and a lower stacking zone in the stacking unit for stacking the holder compartments;  
the loading position is in a central zone between the upper and the lower stacking zone;  
one of the holder compartments is each time movable into the loading position by rotation of the spindles, and the transport means move the information disc from the holder compartment, which is in the loading position, into the play position and into the eject position.
14. The apparatus of Claim 13, wherein in the axial direction of the spindles the central zone has spacing zones at both sides of the loading position, which spacing zones define an axial spacing between the holder compartment in its loading position and the axially adjacent holder compartments in their stacking positions.
15. The apparatus of Claim 13, wherein the average screw thread pitch of the spindles in the loading position is smaller than the average screw thread pitch in the upper and the lower stacking zone.
16. The apparatus of Claim 13, wherein the screw thread pitch of the spindles in the loading position is essentially zero.
17. The apparatus of Claim 13, wherein the average screw thread pitch in the spacing zones is greater than the average screw thread pitch in the upper and the lower stacking zone.

18. The apparatus of Claim 13, wherein there is provided a lower and an upper guide pin for guiding the information discs into the holder compartments of the stacking unit, which guide pins are engageable into the center holes of the information discs from above and from below, respectively.

20. The apparatus of claim 1 in which the overall depth of the apparatus is less than or equal to approximately 1.5 times the information disc diameter.

21. A changer apparatus for information discs, comprising:

a stacking unit for stacking at least two information discs in different respective stacking positions;

a read/write unit for reading information stored on the information discs and/or writing information on the information discs in a play position;

an eject position at which an information disc can be inserted and removed from the apparatus; and

transport means for transporting the information discs from the eject position into a loading position along a curve-shaped loading path, the loading position being a position for loading discs from the loading path of the transport means into the stacking positions of the stacking unit;

and in which the discs can be immediately transported from the eject position to the play position without going through the loading position.